

Total Maximum Daily Load of Nutrients and Dissolved Oxygen for the Christina River Basin

- Stakeholder Meeting
- May 24, 2000 2000

Agenda - May 24

- Introduction, Background, and Status
- Public Involvement and Schedule
- Technical/Model Discussion
- Q & A

Purpose

- Discuss status of the current draft Phase I TMDL
- Present our expectations for the future
- Discuss model and allocation work to date

Christina River Basin

- Covers about 565 square miles
 - Chester County, PA
 - New Castle County, DE
 - Cecil County, MD
- 122 NPDES facilities
- Diverse land uses - urban, rural, and agriculture
- Includes Brandywine, Red Clay, White Clay, and Christina Rivers

Background

- 1993 - Delaware River Basin Commission asked to coordinate activities within the Christina River Basin
 - Water Quality Management Committee created to:
 - Resolve disparate water quality regulations of PA and DE
 - Address current water quality problems
 - Voluntary/water quality planning-management
 - TMDL approach

Background

■ 1996-1997

- EPA sued for failure to establish TMDLs in PA and DE pursuant to Section 303(d) of CWA
- PA settlement-4/97
 - No specific time requirements for Christina Basin segments
- DE settlement-8/97
 - Required completion of Phase I TMDLs for Christina Basin by 12/31/99

Background

- EPA agrees to backstop and will establish TMDLs within 1 year
- Settlement acknowledged current progress made by the WQMC and the phased approach
 - Phase I - address low flow, point source conditions for nutrients and DO by 12/31/1999
 - Phase II - address high flow conditions for nutrients and DO by 12/31/2004

TMDL approach

- Since September 1997, the model/technical group has been working cooperatively to develop the Phase I TMDL
- Group consists of reps from DRBC, DE DNREC, PA DEP, EPA, Tetra Tech, and Widener U.
- Initial Phase I model was inexpensive, however, as more issues developed, the approach turned into state-of-the-art

Current Status of Phase I TMDL

- The calibrated and validated low-flow model has been completed and accepted by the model technical group
- Group is now proceeding on the allocation work of the TMDL and expects to move closer to completion in next couple of weeks

Christina River Basin Phase II

TMDL

■ Phase II TMDL

- HSPF model will be linked to Phase I model
- Schedule for completion of calibrated model
 - Brandywine - May 15, 2000
 - White Clay - July 15, 2000
 - Red Clay - August 30, 2000
 - Christina - September 30, 2000
- Final model completed by March 31, 2001

Future Actions

- EPA must establish Phase I TMDL by 12/15/2000
 - Need to complete allocation work
 - Public involvement through meetings and hearings
 - Public comment period
 - Respond to comments and potentially revise TMDL